SECTION XIV

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63. Peckham (1970), p. 16.

64. This is consistent with R.F. Muth's, (op. cit.) treatment of consumer behavior and derived conditions for household equilibrium.

65. Crocker (1969), p. 189-190. This proposition is also supported by Crocker (1971) Spore's (1972) attempt to discover the shape of the marginal damage function was less fruitful (p. 102).

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expenditures identified in Table 1 in Rice (p. 3) plus the total mortality and morbidity costs identified in Table 32 (p. 110), also from Rice.

76. Lave (1972), op. cit., p. 231.

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79. Rice, op. cit.

80. This estimate is determined by taking 2.34% of the total value of direct expenditures, of morbidity, and of mortality as given in Rice. This total value is determined b summing the costs of morbidity and total mortality (Table 32 in Rice3 plus the value of direct expenditures (Table 1 in Rice).

81. Statistics on Private Health Expenditures and Personal Income-Wage and Salary taken from the 1966 and 1972 Statistical Abstract of the United States (87th and 93rd Editions), Bureau of Census, Washington, D.C., show that there was an annual growth rate in private health expenditures of 6.3% from 1963 to 1970 and an annual growth rate in personal income-wage and salary of 8.2%. By extrapolating the Rice direct expenditures at a rate of 6.3% and the morbidity and mortality (foregone earnings) costs at 8.2%. an estimate of $3.73 is determined.

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5. Supplementary Notes

6. Abstractss Air pollutfon is a problem because it endangers man's health and the environment in which he lives. The informatfon researched in this report indicates that the ost of air pollution damage in 1970 (for measured effects only) falls within a range of 6.1 to $18.5 billion, with a "best*' estimate of $12.3 billion. A benefit-cost analytica ramework for environmental decision-making is outlfned. The methods that have been or an be used to estimate the damages of air pollutfon are identified. The strengths and weaknesses of each method are discussed. The technical coefficients method is utilized n estimating the value of air pollution damage to human health, to man-made materials, nd to vegetation. A particular market study method, the property value approach, was sed to estimate aesthetic and soiling-related costs, Economic losses associated with ir pollution effects on domestic animals and wildlife and the natural envfronment are ot estimated because of data limitations. Damages are allocated by major pollutant and ource category. The utility and limitations of gross damage estimatesare discussed, nd comparison-with other such estimates is made, Report contains bibliography.

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